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INDIANS

AT WORK



FEBRUARY ♦ 1938

UNITED STATES DEPARTMENT OF THE INTERIOR
OFFICE OF INDIAN AFFAIRS • WASHINGTON, D.C.

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I N D I A N S A T W O R K

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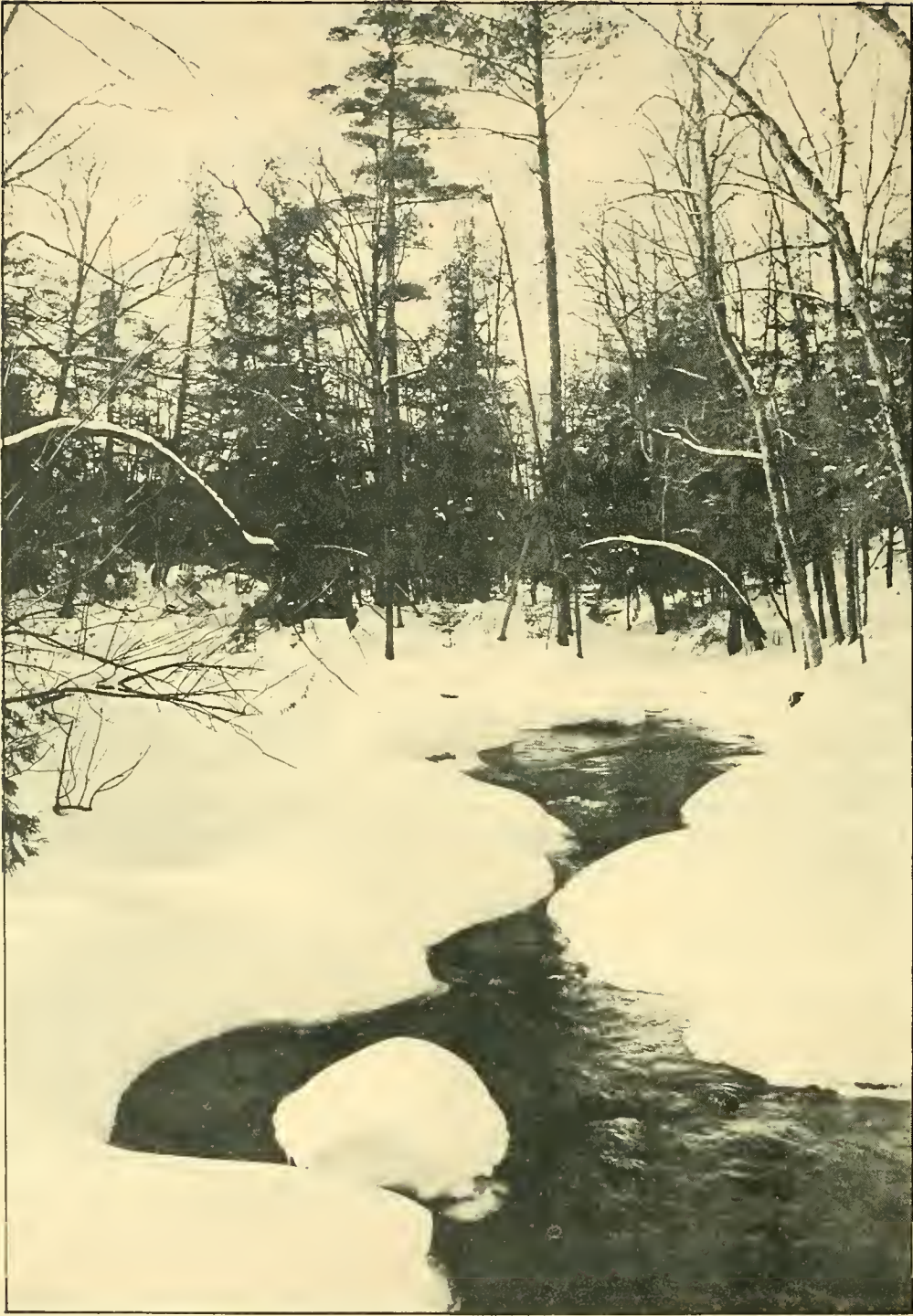
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WOODLAND SCENE ON THE MENOMINEE RESERVATION, WISCONSIN



(Photograph Through Courtesy Of The Wisconsin Conservation Department)



· INDIANS · AT · WORK ·

A News Sheet for Indians
and the Indian Service

VOLUME V

FEBRUARY 1, 1938

NUMBER 6

A group of Indians from one of the big tribes is now in Washington, and they voiced today a complaint which I here set down without presuming anything as to facts.

These men are full-blood Indians, members of tribes organized under the Reorganization Act. They assert that the American custom of legislating in haste, and of legislating without due regard to the personal liberty of citizens, is being adopted by some Indian tribes.

Just as a matter of generalization from history, I should expect that their complaint would be borne out by investigation.

The time comes in the development of peoples, when nations and groups pass from customary law to statute law.

And practically every nation or group which has made this transition, as history shows, has sooner or later plunged into statute-making.

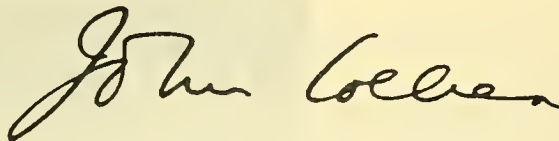
Nearly every such nation or group, at one time or another, has plunged into the making of multiplied and arbitrary rules dealing with the personal lives of its members - including their opinions and their pleasures. This fact is written large in the history of England; in the history of France; and certainly in the history of the United States and of most of its local subdivisions. The history of what is called "sumptuary" legislation is a long chapter of legislative folly. Often the multitude of laws, passed in haste, drop to forgetfulness after a brief and ineffectual but friction-breeding effort to enforce them, and are not even repealed. I remember once compiling the ordinances of New York City dealing with Sunday observances. There were, as I recall, some eighty-odd distinct ordinances, and had they all been put into force, extreme chaos and paralysis would have resulted on the first day. Probably those laws are on the New York City books even now.

Certainly, government has as one of its duties the regulation of human relations and of personal behavior. But the government which focusses its attention - particularly, the legislature which focusses its attention - unduly upon the mandatory regulation of personal lives and of pleasures, is a government which fails to understand its major purposes.

Government fundamentally is a cooperative enterprise of social production, and a vital part of that enterprise is the clearing of the tracks so that the non-governmental, spontaneous energies of people and groups may move freely along the human highway.

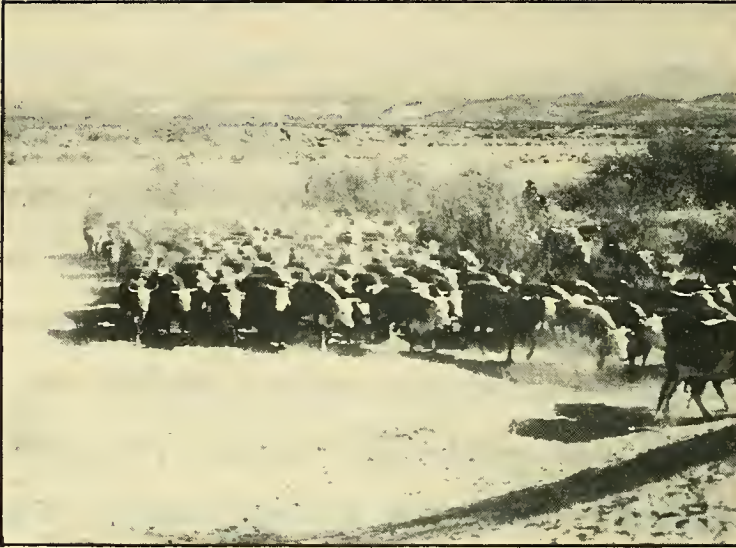
As for Indian tribes, passing rapidly in these current years from customary government to government under ordinances, surely they need to meditate the lesson of history. The big, over-riding problem of Indian tribes today is the economic one. To get more yield out of limited natural resources; to add to the too limited physical assets; to obtain better trading conditions; to plan the economic future. The tribe which fails to meet this major problem will fail in any subsidiary undertaking. The tribe which diverts its attention to questionable interferences with religious observance, with innocent pleasure, with innocent human relationships and deeply rooted harmless customs, will be the tribe which loses the view of the main issues and loses its own future.

In this editorial I do not give any examples, because then I might appear to be singling out particular cases and rebuking or pre-judging them. I am quite certain that a temptation which is universal in the political nature of mankind is not going to be absent from the Indians, and I leave the subject here, in its general terms.

A handwritten signature in dark ink, appearing to read "John Collier". The signature is fluid and cursive, with a large initial "J" and a long, sweeping underline.

Commissioner of Indian Affairs

CATTLE FROM SAN CARLOS AGENCY, ARIZONA



En Route To The Shipping Point



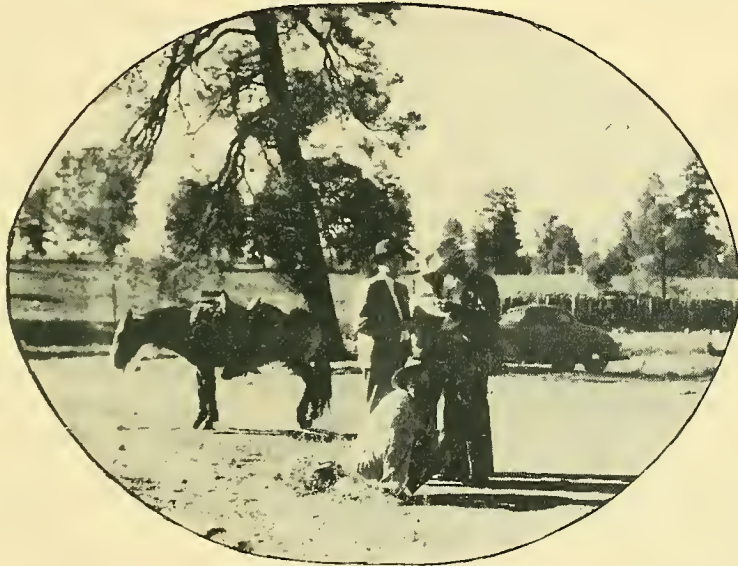
A Fifty-Eight Mile Drive And No Water Madness

THE SAN CARLOS APACHE CATTLE SALE AND THE WORK BEHIND IT

By Claude C. Cornwall, Camp Supervisor, CCC - ID

On November 29, the San Carlos Apache Indians concluded their round-ups and cattle sales for the year 1937, which sent to market 10,209 head of fine Hereford stock, and brought to their Indian owners a return averaging \$31.62 per head.

This is a sharp contrast to the situation at San Carlos cited in a superintendent's report of some years ago, which referred to "nineteen hundred head of the sorriest cattle I have ever seen"....."It is estimated that seven hundred Indians are on the ration rolls"....."All this on a reservation of a million and a half acres of land, which these Indians scarcely use at all."



Bidders in Conference at Apache Cattle Sale, 1937

This achievement is the result of fourteen years of hard work toward an ideal. There are many sides to the establishment of a cattle business: the termination of grazing permits to white cattlemen; the building up of herds to meet modern market demands; the training of Indians in the techniques of cattle management; and - here is where CCC work has helped - range and water development to make possible a maximum use of grazing resources. According



Apache Cowboy

to Superintendent James B. Kitch, the past four years have seen the most rapid strides in this cumulative program, especially the current year.

Cattle selling is a technical business these days, because in addition to the tasks of rounding up cattle and cutting out those which are to be sold there is the necessary grading and classification for top price selling. The following classes are required: yearling steers, short steers, heifers, short

heifers, cows, two-year-old steers, three-year-old steers and stag bulls.

Eighteen different sales were held. The various cattle associations at San Carlos are organized under the traditional Apache clan groups; for this reason, each cattle unit is a separate enterprise. Recognition of these traditional groupings has meant harmonious cooperation among the cattle owners in each association.

Eager bidders for the San Carlos herds this year came from all over the West: from Oklahoma, Texas, Arizona, California, Colorado and even from Iowa. They examined the classified cattle groups; then each in turn submitted his sealed bids to the Indian officers of the cattle associations. The bids were tabulated, and if found satisfactory, award was made to the highest bidder. On two occasions in the spring sale, the Indians rejected all bids, held out and finally got a more satisfactory price. On one occasion during the fall sale, all bids were rejected on a group of yearling steers and the Indians decided to ship to Los Angeles themselves. This action brought them an average of \$4.13 per head over the highest offer at the reservation.

The San Carlos cattle association is pretty much of a self-contained enterprise. An indication of its independence is the fact that issues of cattle to members of the tribe are made from their own tribal herd. Also, a round-up fee of \$5.00 per head is paid to the cattle association on all cattle sold, and the money thus obtained is used to operate the cattle association.

CCC-ID Work Plays Its Part

As the San Carlos cattle enterprise developed, CCC-ID work was fitted in with it, in almost perfect timing. The Indians had just got their business up to the point when the need of water development, trails and range fences for opening up great areas of hitherto inaccessible range became evident. Along came CCC work and it came just at the low point; just at the critical time.

CCC work has built eighty-nine reservoirs, dug three wells, laid fourteen miles of pipe line and developed over a hundred springs, adding in all nearly 200 new water holes. It has built over five hundred miles of new fence; and closed for the first time the reservation boundary along the Gila Rim. It has given these Apache Indians the opportunity to build for themselves one hundred and fifty miles of truck trail and another hundred miles of stock trail and horse-and-man trails. CCC work has opened up new grazing areas and has made possible better distribution of the Apaches' stock.

One of the CCC educational projects at San Carlos has been to teach cooperative enterprise and to help in organizing the various cattle associations.

And CCC camps have proved also to be good customers of Apache products. But more than all this, CCC work has brought new incentives, new opportunities, new knowledge and skills to the young men. They are saving their earnings and making for themselves the opportunity for starting in the cattle business - an enterprise which these Apaches are able to operate along with the best of them.

When the news came in the summer that CCC was established for another three years, the comment of Victor Kindelay was characteristic. He said, "Good. Now we can build some more tanks."



99 Yearling Steers Shipped By
San Carlos to Los Angeles Market.
Shipping Brought a Return of \$4.13
Per Head Over the Highest Bid at
Cattle Sale.

THE COMPLICATED QUESTION OF INDIAN SERVICE QUARTERS

New Schedule Of Salary Deductions For Quarters Seeks

To Remedy Inequalities

By S. W. Crosthwait, Assistant to the Commissioner

For a number of years appointments to positions in the Indian Service were made with the understanding that quarters, fuel, light and other services would be furnished free of charge. Salary rates of employees at that time were fixed with this consideration in mind. Subsequent legislation and rulings, however, changed this situation.

On March 4, 1923, the President approved legislation providing that all positions in the District of Columbia be classified and that positions involving similar duties and responsibilities should be placed in the same salary range. The provisions of this Act, which was known as the Classification Act of 1923, were later extended to all field positions.

On August 1, 1925, at the instruction of the Comptroller General, who had ruled that there was no legal authority for the furnishing of quarters, fuel, light and other services to employees without making suitable deductions from their pay, a schedule for making deductions for quarters and other allowances considered as part compensation was put into effect.

Deductions Made On Basis Of Salary

In order to put into effect immediately the provisions of the Comptroller's decision, an arbitrary scale of deductions was adopted which provided that, generally speaking, the deductions made from an employee's salary for quarters, fuel and other services furnished, would be on the basis of a certain percentage of his salary. The rates adopted at that time and which are still in effect in most jurisdictions, were as follows:

Grades 1 and 2	\$60 per annum
Grades 3 and 4	\$120 per annum
Grades 5, 6, 7 & 8	\$180 per annum

Grade 9:

Salary \$2,000	\$180 per annum
Salary \$2,100	\$180 per annum
Salary \$2,200	\$200 per annum
Salary \$2,300	\$240 per annum
Salary \$2,400	\$280 per annum
Salary \$2,500	\$300 per annum

Grade 10:

Salary \$2,300	\$240 per annum
Salary \$2,400	\$280 per annum
Salary \$2,500 to \$2,800..	\$300 per annum

Grades 11, 12, 13 & 14.....	\$300 per annum
Grades 15, 16 and over	\$400 per annum

At the time the deductions were first put into effect, the Secretary authorized increase of the salaries of those involved so that there would not result a net reduction in the actual compensation paid to the individual. This procedure seemed fair, particularly when it is remembered that initially persons in the Indian Service were employed with the understanding that as a part of their compensation they would be furnished quarters, fuel, lights and other facilities.

At the present time persons are employed with the understanding that deductions will be made from their gross salaries for any services furnished, and their compensation is fixed without regard to the locality to which they are to be assigned or the fact that they may be furnished quarters. There would therefore appear to be no reason why the deduction made from any employee's salary should not be commensurate with the facilities which he is furnished. That is, the person furnished the least in quantity and quality of facilities should have the smallest deduction made from his salary.

The method of making deductions on a scale based on the compensation received by the employee, and thereby failing to take into account the kind and quantity of facilities furnished, obviously led to many inconsistencies; for example frequently we have found situations where two employees were furnished similar facilities and a deduction of \$25 was made from the salary of one and \$15 from the salary of the other.

More Equitable Arrangement Sought, Based On Actual Services Received

In an endeavor to develop a procedure that would eliminate these inconsistencies. there was appointed a valuation engineer,

SCHEDULE OF DEDUCTIONS FOR FACILITIES FURNISHED BY THE INDIAN SERVICE

NAME OF EMPLOYEE -----
LOCATION AND NUMBER OF QUARTERS OCCUPIED -----

NO.	ITEM	ABOVE AVERAGE		AVERAGE		BELOW AVERAGE		REDUCTION RECOMMENDED SURVEY ENG COMMITTEE	FINAL DEDUCTIONS
1	LIVING RM.	USABLE FIREPLACE, EXCEPTIONAL UTILITY WALL SPACE, VERY WELL LOCATED	6.00		4.00	BATH ROOM ENTRANCE INTO L.B. POOR LOCATION, POOR LIGHT AND VENTILATION, LIMITED SIZE	2.50		
2	DINING RM.	VERY WELL LOCATED	3.50		2.50	POORLY LOCATED, POORLY ARRANGED	1.50		
3	KITCHEN	VERY WELL LOCATED AND WELL ARRANGED	3.50		2.50	POORLY LOCATED, POORLY ARRANGED	1.25		
4	KITCHENETTE	VERY WELL LOCATED AND WELL ARRANGED (COMBINATION DINING ROOM AND KITCHEN)	4.00		3.00	VERY SMALL, POORLY ARRANGED	1.75		
5	DEN	SPACIOUS	1.75		1.00	VERY SMALL, POORLY ARRANGED	.75		
6	BED RM.	VERY WELL LOCATED, WELL VENTILATED, EXCEPTIONAL ARRANGEMENT AND EXCEPTIONAL CLOSET SPACE	3.50		2.50	NOT WELL LOCATED, POORLY VENTILATED, POOR CLOSET SPACE	2.00		
7	BATH RM.	VERY WELL LOCATED, MODERN PLUMBING AND WELL VENTILATED	2.00		1.50	NOT WELL LOCATED, OLD TYPE PLUMBING, NOT WELL VENTILATED	.75		
8	FRONT PORCH	SCREENED AND LARGE	1.25		.75	NOT VERY USABLE	.25		
9	BACK PORCH	SCREENED AND LARGE	1.25		.75	SMALL AND NOT SCREENED	.25		
10	SLEEPING PORCH	LARGE AND EARLY ACCESSIBLE TO BED ROOM, SCREENED AND ENCLOSED	1.00		.75	SMALL AND NOT SCREENED AND NOT ACCESSIBLE TO B.R.	.25		
11	BASEMENT	FULL SIZE, WELL INSULATED AND DRY	1.75		1.25	BELOW HALF SIZE, POORLY VENTILATED	.50		
12	GARAGE	HEATED AND CONVENIENTLY LOCATED	2.25		1.50	OVER SHED TYPE, INCONVENIENTLY LOCATED	.75		
13	HEAT FOR COOKING	NOTHING CONSIDERED ABOVE AVERAGE	2.00		2.00	COAL, WOOD OR OIL STOVE	1.00		
14	HEAT FOR WATER	HEATED FROM CENTRAL PLANT OR AUTOMATIC GAS OR ELECTRIC	.75		.50	COAL, WOOD OR OIL IN OPEN VESSEL	0		
15	HEAT FOR BUILDING (SEE NOTE BELOW)	HEATED FROM CENTRAL PLANT OR AUTOMATIC GAS OR OIL	7.00 RM 7-UP RM 4-5 RM 1-3 3.00		5.00 RM 7-UP RM 4-5 RM 1-3 4.00	HEATED BY INDIVIDUAL STOVE HEATERS OR SIMILAR APPLIANCES	1.50 RM 7-UP RM 4-5 RM 1-3 1.00		
16	LIGHT	NOTHING CONSIDERED ABOVE AVERAGE	5.00 RM 7-UP RM 4-5 RM 1-3 1.50		2.00 RM 7-UP RM 4-5 RM 1-3 1.50	FROM COAL OIL LAMPS OR EQUIPMENT	.50		
17	WATER	NOTHING CONSIDERED ABOVE AVERAGE	.50		.50	NOT PIPED AND NOT UNDER PRESSURE	0		
18	REFRIGERATION	MECHANICAL REFRIGERATION OF MORE THAN 5 CU FT CAPACITY	1.25		1.00	OTHER THAN MECHANICAL ICE BOXES	.50		
19	LOCATION OF BUILDING	UNUSUALLY DESIRABLE, ADD	2.00			LEAST DESIRABLE, DEDUCT	2.00		
20	QUANTITY OF FURNITURE	CHARGE TO BE PROPORTIONATE TO QUANTITY OF FURNISHINGS FURNISHED ABOVE THAT SHOWN ON APPROVED LIST			4.00 RM 7-UP RM 4-5 RM 1-3 3.00	CHARGE TO BE PROPORTIONATE TO QUANTITY OF FURNISHINGS FURNISHED LESS THAN THAT SHOWN ON APPROVED LIST			
21	AIR CONDITIONING	\$1.00 PER SEPARATE UNIT PER MO							
22	DEDUCTION FOR ISOLATION				10%	EXTREME ISOLATION, DEDUCT	15%		
23	BUILDING AND GROUNDS	UNUSUALLY ATTRACTIVE, ADD	2.00						
24									
25									

NOTE: IN COMPUTING CHARGE FOR "HEAT FOR BUILDING" DEDUCTIONS SHOWN ARE FOR AREAS REQUIRING HEAT ON AN AVERAGE OF 8 MONTHS A YEAR WHEN HEAT IS REQUIRED FOR A PERIOD OTHER THAN 8 MONTHS DEDUCTIONS WILL BE MADE ON SAME BASIS BUT IN DIRECT RATIO TO THE NUMBER OF MONTHS PER YEAR THAT HEAT IS REQUIRED
RIVAL RATES TO BE FIXED AT NEAREST HALF DOLLAR

who has been compiling accurate and current data on facilities furnished to the employees at the various field units of the Indian Service. There has also been appointed a committee here in the Washington Office to study these data and to develop a procedure for fixing of rates consistent with the facilities furnished in each instance and not inconsistent with the rates for which such services might be procured outside of the Service.

After careful study of the data collected by the valuation engineer, the committee has adopted a schedule which will hereafter govern the changes to be made for apartments, cottages and similar accommodations furnished to employees of the Indian Service. This schedule is reproduced on the opposite page. A separate schedule is used in determining the rates to be charged persons furnished rooms in employees' clubs and similar structures. This schedule, which is on a monthly basis, is as follows:

Choice room with private bath	\$18.00
Choice room with semi-private bath*	16.50
Choice room with community bath*	14.00
Average room with private bath	16.00
Average room with semi-private bath	14.50
Average room with community bath	12.00
Least desirable room with private bath .	14.00
Least desirable room with semi-private bath	12.50
Least desirable room with community bath	10.00
Small room in dormitory or infirmary with private bath	10.00
Small room in dormitory or infirmary without private bath	5.00

- * A semi-private bath is one that serves two rooms.
- A community bath is one that serves more than two rooms.

It may be necessary to modify these schedules from time to time, but changes will be made only after careful consideration of all factors involved.

Deductions in accordance with the procedure here outlined will be made as rapidly as the surveys can be completed by the valuation engineer. The changes in rates at any particular jurisdiction will all be made effective at one time, and as soon as possible after the valuation engineer completes his survey. When the valuation engineer reports at a jurisdiction for the purpose of making a survey of quarters and other services furnished

to the employees, he has been instructed to request the officer in charge to appoint a committee of employees at that unit to meet with him after completion of the survey for the purpose of determining the rates which should be recommended for the facilities furnished to the employees of that particular jurisdiction. As far as possible the rates must be in accordance with the schedule shown here but the determination of whether the particular facilities furnished belong in the average, above-average, or below-average class is one that must be made by the valuation engineer and the committee appointed by the superintendent. Whenever the valuation engineer and the committee can agree on the proper rate, it will usually be accepted by the Quarters Committee here in Washington as the final rate. Difference between the valuation engineer and the committee will be settled by the Quarters Committee of the Washington Office.

Heretofore no definite limitation has been placed on the household equipment and other items which may be furnished to employees of the Indian Service. At an early date, it is proposed to issue instructions to field officers authorizing the purchase for use in employees' quarters of only such items as are shown in the following tabulation:

Furniture To Be Supplied Definitely Listed

Living Room:

Studio couch or davenport
Overstuffed chairs (limit 2)
Occasional chairs
Living room table
End or occasional table (1)
Ottomans (one large or two small)
Rug (one large or two small)
Bookcase
Magazine rack
Electric floor lamps (limit 2)

Each Bedroom:

Bed or beds
Bed springs
Mattress
Pillows
Dressing table or dresser
Mirror
Chairs
Scatter rugs - (Navajo preferred)
Floor or bed lamp
Wardrobe

Dining Room:

Dining room table
Dining room chairs (limit 6)
Serving table
Buffet
China closet or cupboard
Rug

Miscellaneous:

Lawn mower
Fire extinguisher
Window shades
Porch chairs (limit 2)
Wastepaper baskets
Vacuum cleaner
Door mats

Kitchen or Breakfast Nook:Den:

Range
Ice box (mechanical)
Kitchen table and chairs
Kitchen cabinet
Linoleum floor covering
Breakfast-nook table
Breakfast-nook chairs or benches
Garbage can

Saw-buck table (limit 1)
Chairs (limit 2)
Rug - small
1 bookcase

Other items which it may be desirable to furnish will be issued only upon specific approval of the Washington Office. It will be noted that this approved list of equipment does not include such items as blankets, sheets, pillowcases, dishes and cooking utensils which have heretofore been more or less uniformly supplied to employees of the Indian Service.

The equipment for rooms in employees' clubs and rooms furnished to employees under similar circumstances will not be governed by this list. Generally speaking, rooms in employees' clubs will be furnished on the same basis as rooms in hotels are furnished, except that the Indian Service will not bear the expense of laundering bed linens and blankets. Such expense will have to be borne by the employees assigned to rooms in clubs and similar structures.

* * * * *

CHANGES OF ASSIGNMENT

Miss Lela M. Cheney, Supervisor of Social Work, is on leave to carry on work at the University of Chicago. Miss Ethel Mae Bratton, social worker at Winnebago Agency, Nebraska, has been detailed to take Miss Cheney's place.

Mr. George Barrett, formerly social worker at the Consolidated Chippewa Agency, Minnesota, has been made principal of the Wrangell Institute, Alaska. Mr. Barrett is himself an Alaska Indian of the Tlingit Tribe.

* * * * *

RECENT ELECTIONS ON TRIBAL CONSTITUTIONS

<u>Date</u>	<u>Jurisdiction</u>	<u>For</u>	<u>Against</u>
December 14	Kiowa Tribe of the Kiowa Agency, Oklahoma	302....	348
January 5	Pawnee Tribe of the Pawnee Agency, Oklahoma	197 ...	60

SERIES OF EXTENSION AND CREDIT MEETINGS HELD AT WASHINGTON

All of the Indian Service's credit agents and associate credit agents, two auditors for the credit group and five extension supervisors were called into the Washington Office for a series of meetings January 10 to 14. The program included general reviews of existing problems, planning for future work and discussions by workers in similar fields outside the Indian Service, including the Farm Security Administration, the Farm Credit Administration and the Extension Branch of the Department of Agriculture.

Extension supervisors who attended were: John T. Montgomery and Ralph S. Bristol, Salt Lake City Office, Utah; James W. Kauffman, Minneapolis, Minnesota; Will R. Bolen, Oklahoma City, Oklahoma; and Mrs. Henrietta K. Burton.

Credit agents and associate credit agents included: S. M. McKinsey, Minneapolis, Minnesota; Clyde G. Sherman, Ashland, Wisconsin; Charles R. Mountjoy, Pierre, South Dakota; H. D. McCulloch, Spokane, Washington; John E. White, Salt Lake City; F. A. Asbury, Salt Lake City; Donald H. Wattson, Oklahoma City; Zeb Lowe, Oklahoma City; P. J. Fitzsimmons, Phoenix, Arizona, John A. Krall, extension agent, Blackfeet Agency, Montana. Two auditors for the credit group - John Pohland of Salt Lake City and Jubel Wilson of Oklahoma City - also attended the meetings; and James Curry, Attorney, Salt Lake City, Utah.

* * * * *

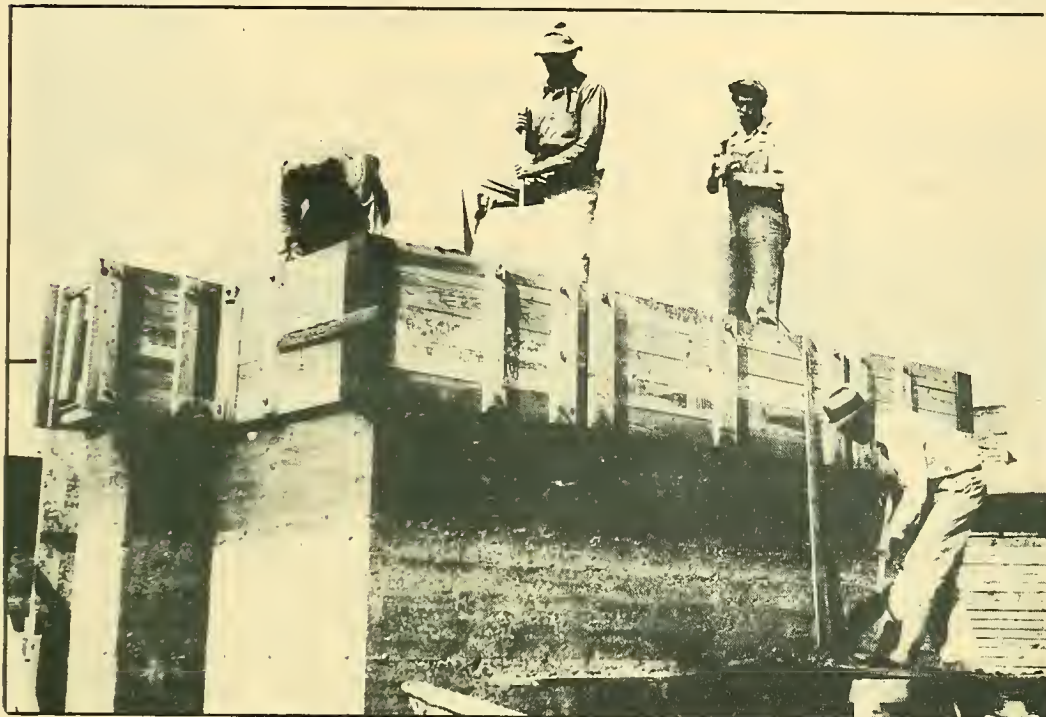
VISITORS AT THE WASHINGTON OFFICE

Visitors at the Washington Office during late December and January have included Mrs. Lucy Wilcox Adams, Director of Navajo Schools; James H. Finley, Supervising Probate Attorney for the Five Civilized Tribes, and Dennis H. Petty, Probate Attorney for the Wewoka District, Five Civilized Tribes Jurisdiction; Don Hagerty, of the Indian Reorganization Staff; Allan Harper, of the Technical Cooperation - Bureau of Indian Affairs unit of the Soil Conservation Service; Claude M. Hirst, Superintendent of Indian Education for Alaska; Allan Hulsizer, Supervisor of Secondary Education, and Richard Tisinger, Superintendent of Indian Schools (who has since gone on leave to Cornell University to work on his doctorate); A. C. Monahan, Coordinator for Oklahoma and Kansas, Forrest Stone, Superintendent of the Wind River Agency, Wyoming, who is accompanied by Robert Friday, Chairman of the Arapaho Council and Gilbert Day, Shoshone Council Chairman; and Henry Talliman, Chairman of the Navajo Tribal Council; and Drags Wolf, Foolish Bear and Arthur Mandan from the Fort Berthold Agency in North Dakota.

HOUSES OF EARTH

By A. B. Lee*

Houses of earth are not new to Indians: a large number of Southwestern Indians, and whites as well, live in adobe dwellings that are cheap to build and comfortable to live in both winter and summer. But there is another type of earth-house, more



Rammed Earth Construction In Process
(Farm Security Administration Photograph;
Thomas Hibben, Architect)

permanent even than the durable 'dobes and of wider possible range, that the Indian Service may, after experimentation, encourage Indians to build for themselves. And that is rammed earth, or pisé de terre construction.

*(Note: This writer has published an illustrated booklet on "Houses Of Earth" which tells in detail how rammed earth houses are built.)

There is nothing untried about rammed earth building. This method is older than recorded history. Rammed earth watch-towers and walls erected by Hannibal, 200 years B. C., were described by Pliny the Elder 250 years later as being intact and in good condition.

The earliest known example of the use of rammed earth in this country is in St. Augustine, Florida, where there is a house built of it in 1556 - still standing. Also the French were known to have used it in early days in South Carolina.

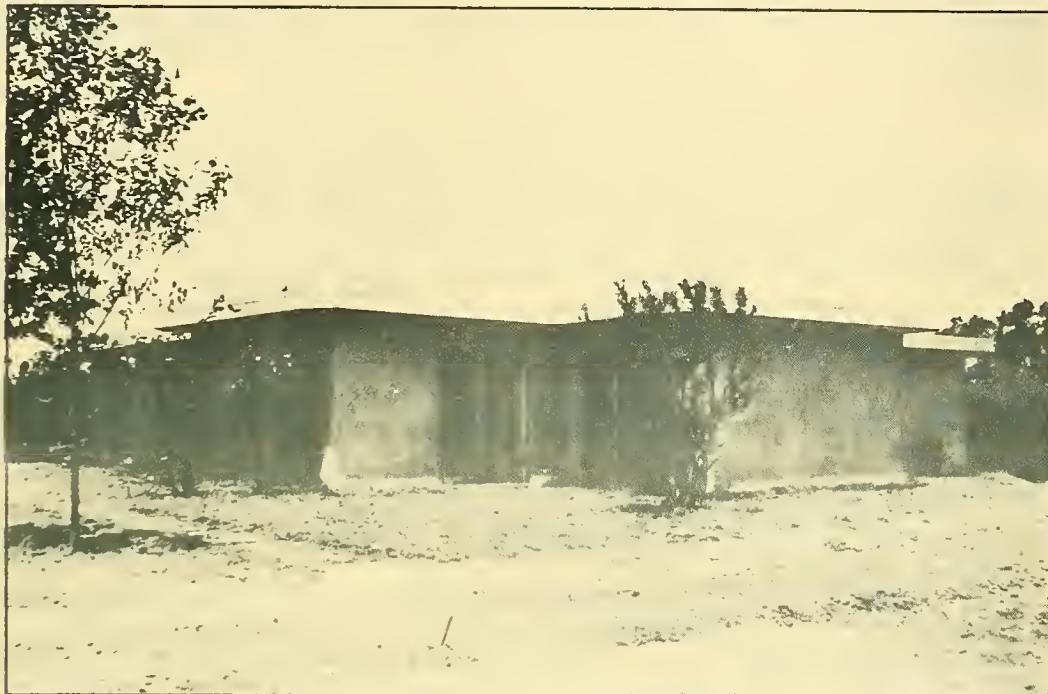
What is rammed earth construction? It is dirt, plain dirt, laid up between wooden forms, then thoroughly pounded for compactness and allowed to dry. Among its advantages are the facts that dirt costs nothing to buy, nothing to transport and that the construction can be carried out by unskilled labor. Rammed earth walls are permanent, fire-proof and increasingly strong with the passing years; they are dry, vermin-proof and afford natural insulation against heat and cold. When a group of buildings is erected in sequence, the wooden forms may be used again and again. Pisé work presents so little difficulty that it can be done by workers without previous experience, provided they exert care in a few essential particulars.

Some experimental work in the Indian Service in rammed earth was begun in the summer of 1936, when a poultry house was built by Sioux Indians at the Pine Ridge Reservation, South Dakota under the supervision of a student from the State College of Agriculture at Brookings, South Dakota. The walls were only 12 inches thick, but after completion it was found that this building was the warmest and driest of any at the Oglala Indian Community High School. There was twenty degrees' difference between the temperature of the inside and outside walls: a challenge to builders in a region where the thermometer registers from 108 degrees in summer to 30 below zero in winter.

A rammed earth dwelling was built at the Turtle Mountain Reservation, North Dakota, in 1936, and another at Pine Ridge last summer. Further experiments with this and other types of buildings are being undertaken on Pine Ridge. Any widespread use of rammed earth, however, must wait for careful evaluation of the present experiments.

Pisé de terre construction is so little known, perhaps, because no one stands to profit from its use. Unlike other building materials, there is no one to advertise it; no one, except the man who uses it, to reap rewards from its exploitation.

Rammed earth can be used for houses, barns, poultry houses, schools; in fact for every type of building that is protected from standing water. Its use is simple; according to Dr. H. B. Humphrey of the Department of Agriculture, anyone able to follow a blue-print and simple instructions should have no difficulty in erecting a rammed-earth building.



Rammed Earth House. Gardendale Tract, Birmingham, Alabama.
(Resettlement Administration Photograph.)

It should be understood from the outset, however, that success depends upon the care with which materials are selected and used. The first essential is selecting the right kind of soil having the correct amount of moisture; the second is thoroughly compacting the earth. There are others also, but these two are the most important and unless rigidly observed the finished product will not be sound.

While all earths are not suitable, most of them may be made so by proper mixture. Pure sand is not suitable at all, as it will not bind. Nor will pure clay do, as it shrinks too much. One author recommends a mixture of two parts clay, three parts sand, and one part coarse aggregate. All authors agree that all

organic matter should be eliminated; therefore if soil dug from the cellar is used, the top soil should be separated out and, for this purpose, discarded. The most satisfactory moisture content is between seven and fourteen per cent of the weight of the mixture.

A carefully-drawn plan is a first essential, with every opening located and provided for: windows, doors, conduits for pipes and electric wires, with the conduits close to the inner surface of the walls for accessibility, since after the walls are finished it is extremely difficult to make changes.

Since pisé de terre walls must not be placed on the ground, a stone or concrete foundation reaching down below frost line and extending at least a foot above ground is required. On top of this there should be a damp-proof course to prevent moisture from rising by capillary attraction into the rammed earth.

The only tools and equipment required are the rammers and the lumber for forms. These are simple and can be made by anyone handy with ordinary tools. The general requirements of a form are that it should be very rigid and not liable to warping. It should be adjustable to various thicknesses of walls, and great care should be exercised to make sure that the form is straight and true and that the inside surface is planed and smooth.

For a two-story rammed earth building, the walls should be from 22 to 27 inches thick. The earth is shoveled into the forms in layers six inches deep and spread evenly; then it is carefully and thoroughly tamped with wooden blocks shod with iron, weighing about 15 pounds. When it has been sufficiently beaten it will ring like concrete. Another layer of earth is added and tamped; the process is repeated until the form is full and the dirt level with the top. The process is not as slow as might be thought; as an example, two inexperienced men built a six-room house in less than a month.

Once properly rammed, the walls are so solid that they will support from ten to thirty tons per square foot.

An interesting example of rammed earth construction is the house erected for his own family by Dr. H. B. Humphrey near Cabin John, Maryland, in 1921. It is of simple Dutch Colonial design, built upon a foundation of concrete blocks, and with a second story finished with frame. The outer walls from foundation to the sills of the upstairs windows are of rammed earth obtained from the cellar excavation. They are 18 inches thick without reinforcement. The house is 48 by 32 feet, with a tiled roof weighing 13 tons.

Proof of rammed earth's durability is Hilltop Manor, standing in the Northeast section of Washington, D. C. at 1300 Rhode Island Avenue. Built in 1773 by slave labor, it has withstood more than a century and a half of use. A house-wrecker engaged to tear it down some years ago grew discouraged after repeated efforts and canceled his contract, advising instead restoration of the old 27-inch walls. Subsequently an ell was added of different material, furnishing an interesting basis for comparison, and showing that the rammed earth walls possessed unusual insulating qualities against heat and cold.

There are also well-known rammed earth buildings at Hillcrest Plantation near Sumter, South Carolina, erected by W. W. Anderson in 1818. This group consists of ten plantation buildings and a large church. These structures, besides standing the ordinary ravages of time, have stood through the Charleston earthquake (August 21, 1886), a three-day hurricane (1895), and a cyclone (February 16, 1903).

The Resettlement Administration has recently built a group of rammed earth houses, each with a barn and pump house, in Alabama, at the Gardendale Tract, near Birmingham.

A six-room cottage built on a concrete foundation and without a cellar was erected at Gardendale for \$2,250, including wiring, plumbing and fixtures. After building these experimental houses, Thomas Hibben, consulting engineer, took his crew of workers and in one week's time put up in the State Fair Grounds at Birmingham a complete six-room cottage. As to cost: this typical six-room house, costing \$2,250 was built principally by relief workers. \$850 was for materials and \$1400 for labor. The job took 700 man-hours of skilled labor and 1,800 hours of unskilled labor. This house had three bedrooms each 12' by 12'; a bathroom 6' by 8'; hallway 6' by 12'; living room 12' by 23'; front porch 9' by 25'; kitchen 12' by 12'; and rear porch 9' by 15'.

In conclusion, too much stress cannot be placed on care in doing the work. Carelessly done, the method will fail; properly built, a rammed earth house will stand for centuries and pay generous dividends in comfort and low cost of upkeep.

* * * *

WALAPAI CATTLE SALES, TRUXTON-CANON AGENCY, ARIZONA

From the Walapai Reservation during 1937, 450 cattle, bringing \$15,404.34 were sold from the I. D. herd and 1,594 cattle, bringing \$48,232.31 were sold by individual Indians.

MAPPING PROGRAM IN FIVE CIVILIZED TRIBES AREA

The inadequacy of existing maps has been a continuing handicap to the Indian Service program in the Five Civilized Tribes area in eastern Oklahoma. No one knows, and no records show completely, exactly what land is Indian-owned. This situation is finally being remedied .

In line with the present program of economic rehabilitation in Oklahoma and anticipated developments under the Oklahoma Indian Welfare Act, the Indian Service has started a campaign of assaying Indian land assets in the Five Civilized Tribes area and mapping them in relation to the state as a whole.

The task is one of real magnitude: the total area consists of 925 townships, involving 44 counties; and the total acreage is 312,000, or 33,000 square miles.

The survey will take advantage of all existing data compiled by the U. S. Geological Survey, the General Land Office, state workers and by recent WPA projects. There are many gaps in the data and inaccuracies have grown up through the years which no one group has found the time to correct.

Land mapped will be grouped under the following classifications:

- Tribal land
- Restricted Indian land which is non-taxable
- Restricted taxable Indian land
- Submarginal land purchases for Indians
- Indian-owned lands sold to non-Indians
- State-owned lands
- Non-Indian-owned and Indian-owned fee patented lands
- U. S. National Forests
- State and U. S. reserves other than National Forests
(game refuges, national or state parks and so forth).

In addition to the ownership classifications, the maps will show highways, railroads, drainage systems, towns, locations of government schools, hospitals and field clerks' headquarters, county lines, township and range lines, latitude and longitude lines and locations of Indian population groups.

The value of completing these land status maps to administrative work in the Five Tribes area is obvious. More intelligent planning of road work, CCC work, land acquisition, soil conservation work and of integration of Indian Service activities with state programs will be made possible.

It is estimated that six Indian assistants and two draftsmen can complete the work in nine months.

* * * * *

IRRIGATION HELPS GARDENS AT KYLE, SOUTH DAKOTA

For twenty years, writes Frank Short Horn of Kyle, on the Pine Ridge Reservation in South Dakota, gardens have been planted at Kyle with partial or complete crop failures due to lack of rainfall. This past year, the farm agent, Douglas D. Murdock, began talking irrigated gardens to the Indians, and community organization for garden development. According to Frank Short Horn, the Indians listened first with skepticism, then with interest, as the farm agent talked and drew diagrams showing the new technique. Nine small groups were organized in this district of over five hundred Indian families - the Thunder Bull Community, Three Mile Creek, American Horse Creek, No Flesh, Kyle, Potato Creek, Medicine Root, White River and St. Cecilia. The nine community gardens became a reality and last summer and fall saw a harvest in spite of grasshoppers and other pests.

To quote Frank Short Horn: "To see the streams of water running down the rows of thirsty plants - that is a fine thing. This strange thing irrigation makes plants grow when no rains come and the hot wind blows. Many cans of peas, beans, beets and corn have been put up for the winter; corn was dried; and beans and cucumbers were salted down and put in barrels for the school children and for the families. Food for the winter is in our cellars. Our boys and girls are learning how to run the water down to the plants. The tomato worms, blister, beetles, grasshoppers, potato beetles and sand fleas still come, but at least we know that the lack of rain will not wipe us out."

* * * * *

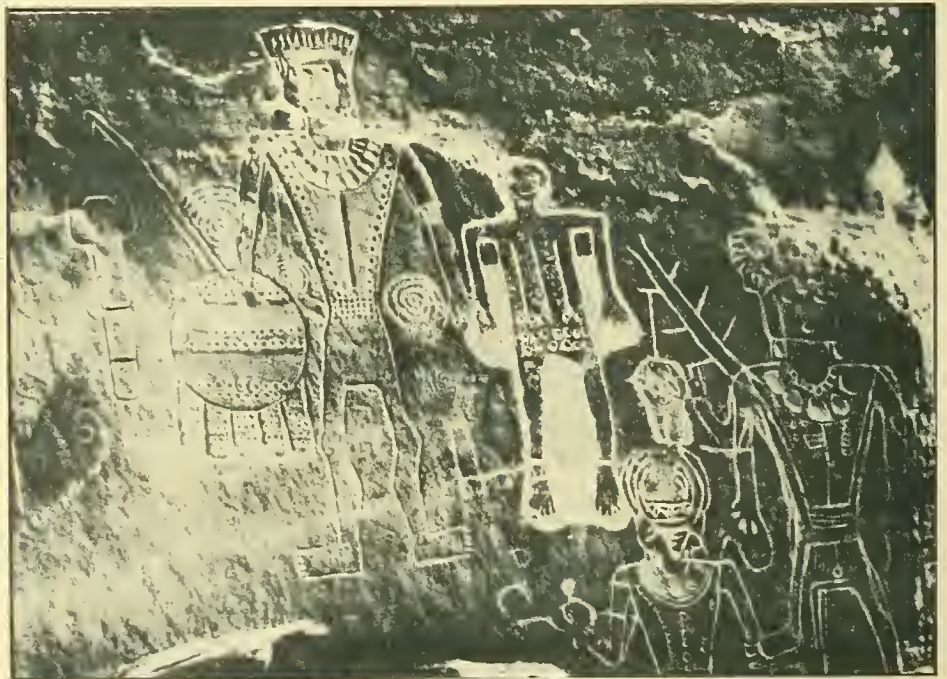
COTTON AND CORN OFFER EROSION HAZARD TO SOIL

Land planted to corn and cotton tends to erode more than one hundred times as fast as land planted to grass and other cover crops, according to experiments now being carried on by the Soil Conservation Service.

ANCIENT RECORDS ON STONE



Petroglyphs On The Walls Of Dinwoodie Canyon, Wind River
Indian Reservation, Wyoming.
(Photograph by Denler.)



Group In Dry Fork Canyon Near Vernal, Utah.
(Photograph By Frank Beckwith, Sr., Delta, Utah)

ANCIENT RECORDS ON STONE

By Julian H. Steward, Bureau of American Ethnology

The rock paintings and carvings - petroglyphs - which are found on rocks in all parts of the United States have piqued the interest of scientists, amateur scientists and passers-by ever since the coming of the white man to this country. A variety of fabulous theories as to their origin have been offered: that they prove that Egyptians, Scythians, Chinese and the Lost Ten Tribes of Israel invaded America in ancient days; that they are indications of Aztec wanderings; that they are markers for buried treasure; records of vanished races; symbols of diabolical cults. A single petroglyph, that on Dighton Rock on Narragansett Bay, Massachusetts, has inspired nearly six hundred books and articles over a period of three hundred years.

What, as a matter of fact, in the light of scientific investigation, rather than speculation, is actually known about these petroglyphs? Who made them?

Petroglyphs occur in all parts of the United States - as they occur also on all continents - as records of primitive men. American petroglyphs are extraordinarily varied: some are complex in design and strikingly vivid in execution; others are crude, faint and confused in form. It is this very diversity which has made it possible to read into them the astonishing variety of meanings which have been accorded to them.

Petroglyphs are most numerous west of the Rocky Mountains, where the large number of smooth rock faces provided by caves, cliffs and boulders have afforded opportunities for this art and where the semi-arid climate has preserved them from destruction by the elements. There is scarcely a mountain-side, canyon, or other place frequented by primitive man where some trace of them may not be found. Perhaps the greatest number occur in the Great Basin area of Western California, Nevada and Utah.

Petroglyphs: Prehistoric "Doodling", or Significant Symbols?

What motivated the makers of petroglyphs? Probably a variety of motives, just as the drawings on skin, bone, wood and other materials, were made for differing reasons. Learned opinion has tended to divide into opposing schools of interpretation: the idle markings school,

which bravely holds that petroglyphs are mere random fancies created in leisurely moments; and the serious purpose school which weightily proclaims that all petroglyphs have deep historical or symbolical meaning.

In favor of the first theory is



Human Figure
(Virginia)



Mountain Sheep
(Near Donner Lake,
Eastern Calif.)



Bison (Colorado Riv-
er. at mouth of the
Fremont River, Utah.)



Antelope or Moun-
tain Goat? (Near
Kayenta, Ariz.)

the undisputed fact that since the coming of the white man, Indians have made hundreds of petroglyphs of men, horses, railroad trains, houses, boats and other things of civilization. And, in view of the great trouble which white men frequently take to deface rocks and trees with names and initials, especially where other persons have done so before them, it would be foolish to suppose that the motives of prehistoric Indians were not sometimes equally trivial. It is a

safe guess that a large number of petroglyphs were produced by persons amusing themselves during dull hours.

Many pre-Columbian petroglyphs, however, must have been made for some definite and important reason, else the designs of each area should not conform in such large degree to a prevailing style and they would not have been worth the immense labor often required to make them. Many are undoubtedly composite in origin, with newer designs superimposed upon the old.

Many Had Religious Purpose

Many though by no means all petroglyphs were made for religious purposes. Primitive peoples believe the world to be filled with supernatural forces which must be supplicated, placated, or taken into account in some other way at every turn. These forces and spirits are often made more objective through pictures and symbols. A god may be more successfully supplicated if his likeness is present. A supernatural guardian spirit, which has appeared in a dream to some person to offer its aid, will seem more real if one has a tangible symbol of its presence. Ceremonies and rites are more satisfying if

there is visible evidence of the supernatural forces with which it is concerned. People, therefore, make wooden and clay images, altars, altar paraphernalia, sacred dress, insignia and regalia, and, not infrequently, pictorial and symbolical representations on stone.

In a fortunate few instances the religious meaning of petroglyphs is remembered by modern tribes. Some of these were made in connection with puberty rites which were important ceremonies to most North American tribes, for through them youths were inducted into the status of adulthood.

Around the cliffs and mesas of the Hopi Indian villages in Arizona there are many familiar designs, such as rain-cloud symbols, clan marks and others made in the distinctive Hopi art style. In the Great Lakes region there are occasional bird and animal designs, which were probably clan totems and other realistic and conventionalized figures which may have been pictographic records of religious beliefs, similar to those made on birch bark. Throughout the Colorado River drainage of Utah, there are hundreds of extraordinarily elaborate anthropomorphic figures, made perhaps a thousand years ago, which seemingly

portray either masked dancers or deities. It is also possible that some of the animal pictures and hunting scenes found in various places were part of magic for increasing the species which were important for food or for hunting luck, though not a shred of evidence can be offered in any particular instance to prove it.

Many other petroglyphs, though serious in intent, were nonreligious. There are, for example, many geometric designs in the Southwest which are clearly taken from textile or pottery decoration. Some petroglyphs seem to have been trail markers or records of visits.

Petroglyphs As Art

In some localities, petroglyphs provide the only known examples of primitive art. In considering them as such, however, the difficulty of the rock medium and the fact that the artistic motive was probably secondary to some other purpose should be borne in mind.

It is noteworthy that practically all of the recognizable pictures are of men, mammals, reptiles, birds and insects. There are very few fish, and virtually no plants.

The artistic merits of the realistic and semi-realistic pictures are extremely variable. Human or anthropomorphic beings, for example, vary from the extremely complex, somewhat conventionalized, and carefully executed masked men or god images of eastern Utah (see illustration on page 26), to crude linear figures produced with a faltering hand and no real effort at realism, in the Great Basin and elsewhere.

The finest single example of



Petroglyphs Representing Mythical Or Imaginary Beings.

Left - Clear Creek, Utah; Center - The Dalles, Columbia River;
Right - New Mexico.

petroglyph art is an elaborate and very elegant group of human beings near Vernal, in northeastern Utah, placed high on a sandstone cliff (see illustration on page 27).

Animals, too, are extremely variable in realism and accuracy. Some are fair likenesses of various species; others are so crude or so greatly conventionalized that it is possible only to know that they are quadrupeds. Quadrupeds are, in fact, generally identifiable only when they possess some salient and unmistakable characteristic, such as the long, curved horns of the mountain sheep, the branching antlers of the deer or elk, or the large head and short horns of the bison. In some areas unreal and probably mythical creatures, whose

likeness is unknown in the world of nature, defy identification. There are the ameba-like sketches and many-legged creatures of the southern San Joaquin Valley of California, the club-handed and other grotesque men of the Great Basin, certain ghostlike figures from the Columbia Valley and many composite creatures from all areas.

Now and then it is claimed that some petroglyph represents a now extinct species of animal. When it is asserted, as in Arizona a few years ago, that the pictures are dinosaurs, it is sheer nonsense, for the great reptiles were extinct long before man had begun to evolve anywhere on the face of the earth. When, however, the petroglyphs are thought to be of the giant bison, mammoth, ground sloth, camel or others of the great Pleistocene mammals which are now known to have survived after man's advent to the New World, the claim should be examined with care, for it is entirely possible that human beings did depict these now extinct species. All such thoughts should take into consideration, however, the possibility of mistaken interpretations of unskilled drawings, the motives behind which are not known.

Antiquity of Petroglyphs

There are several means by which the general age of petroglyphs may occasionally be ascertained. Geology has sometimes provided important clues. For example, at the Salton Sea, in southern California, a few simple, linear petroglyphs occur under layers of travertine, a deposit left on the ancient shore line by the waves of the sea, which was much



The Pictures In Barrier Canyon, Utah Are Painted With Red And Brown.
(Photo Through Courtesy Of Dave Rust, Provo, Utah)

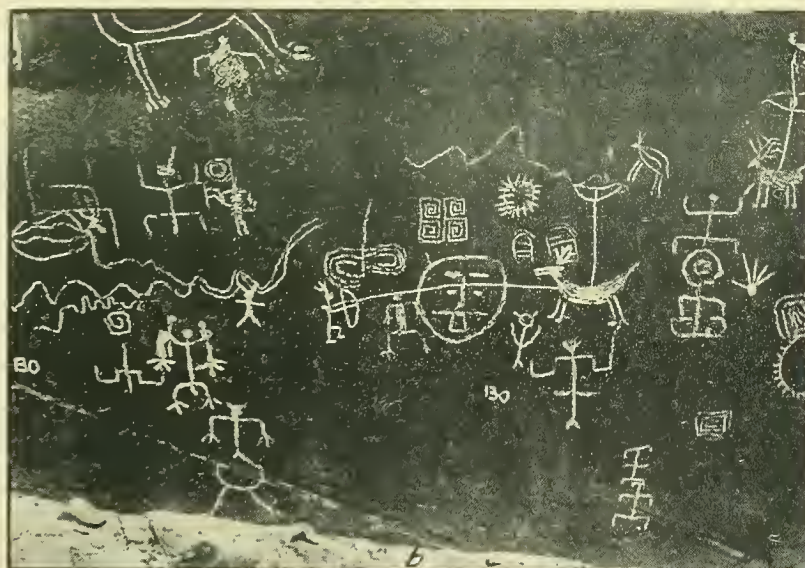
higher than it is today and filled much of the Imperial Valley. These petroglyphs must, therefore, be as old as this inundation, which geologists believe to have occurred between 300 and 1,000 years ago. Other petroglyphs on the travertine must, on the other hand, be more recent than the inundation.

Near Grapevine Canyon, Nevada, there are many complex rectilinear figures on rock surfaces, part of which are now covered by a gravel terrace. The gravel is a stream deposit which, geologists state, was

built up several hundred years ago, possible longer. Some figures are covered with desert varnish, a peculiar oxidation that slowly coats certain rocks, and is, therefore, evidence of considerable antiquity.

When geologic aspects of this problem have been further exploited, we may expect additional light on the problem of antiquity. Geologic estimates of age are always broad, however, and can seldom fix dates with the precision required to relate petroglyphs to other types of archaeological remains having known antiquity.

NOTE: This article is condensed from a recent Smithsonian Institution pamphlet: "Petroglyphs of the United States", Publication No. 3437 of the Smithsonian Institution, U. S. Government Printing Office, Washington, 1937. The bulletin is by Dr. Julian H. Steward.



Hunting Scene Near Kanab, Utah. The Representation Of The Bow And Arrows Shows That It Was Made By Pueblo Or Later Indians, For The Bow Was Unknown In Early Basket Maker Times. The Angular Geometric Figures Are In Pueblo Style.
(Photograph By Dr. Julian H. Steward.)

TULAROSA CANYON

By Erik W. Allstrom,

Camp Superintendent, CCC - ID, Phoenix, Arizona

Tularosa Canyon - a beautiful name; and a place that for ages has waited the magic touch of a conjuror.

Now comes the Indian Division of the CCC, the magician to transform the long, swampy valley into rich acres of Apache farm-home land.

The steep slopes of the canyon are covered with a fine growth of Ponderosa Pine timber. Mature trees are being cut and marketed only to keep pace with normal growth, so there will be a perpetual supply. This beautiful growth of timber holds the rainfall so that the run-off is very gradual and all along the lower slopes of the canyon are living springs of clear, pure water feeding into the never-ceasing flow of Tularosa Creek. The centuries have filled the canyon bed with a rich silt that has never grown more than bulrushes and horse-tail.

Four miles up the canyon from Mescalero there has grown up the first complete portable frame camp in the Southwest Indian country.



General View Of The Head Springs Camp In Tularosa Canyon,
Mescalero Agency, New Mexico

Heretofore the Indian CCC has lived in tents which soon leaked, blew open or ripped in the wind, and which all too frequently caught fire and burned, along with the clothes and bedding of the occupants. In the new camp the units are sixteen by sixteen feet square. Floors are of two equal sections, walls are seven by sixteen and each side of the peak roof is in two sections. Windows and doors are of glass for the winter and of wire screen for the summer. The entire building is strongly held together by fourteen half-inch bolts.

There are nine such cabins for the enrollees, each cabin housing six men. One is reserved for a manual arts and crafts shop. The cook and his helpers have a cabin and in another the foreman has his office and living quarters. Three cabins, with inside partitions removed, make a combined kitchen and dining room, fitted with tables and benches built and nicely decorated by the boys themselves in their spare time.



From Left To Right: First Of The Enrollee Cabins; Combined Kitchen And Dining Room; And Cabin For Cook And Helpers.

About twenty years ago United States troops from Fort Bliss spent several months on the Mescalero Reservation at a practice camp. A well-built log cabin about 24 by 48 feet was built at that time by the Army. This has been set aside as a recreational hall. There Indians gather to play quiet games, listen to the radio or read the sometimes current, but always acceptable magazines. Soon they will have the beginnings of a library, toward the founding of which seventy volumes have been secured by gift from the Albuquerque schools. Efforts are being made to secure a motion picture projector to be used for visual education as well as for entertainment.



A Section Of The New Tularosa Canyon Truck Trail Showing A Caterpillar Bulldozer, Two Jackhammer Drills And An Air-Compressor, All Operated By Apache CCC - ID Enrollees.

A good truck trail is now in process of construction along the side of the twenty-five mile long canyon. When finished it will provide a short road to Cloudcroft, the El Paso playground area, as well as a quick way of reaching forest fires which all too often have ravaged these mountains.

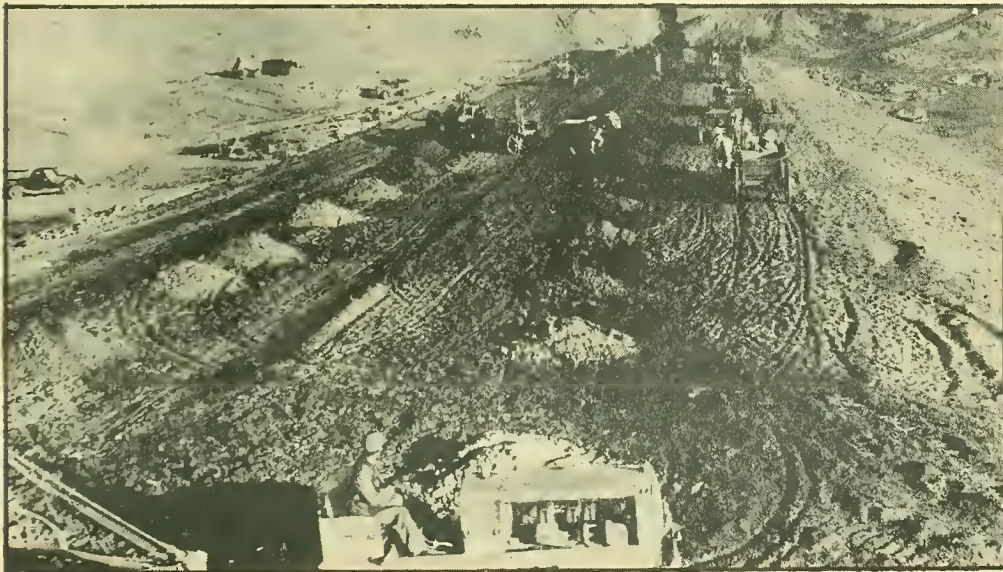
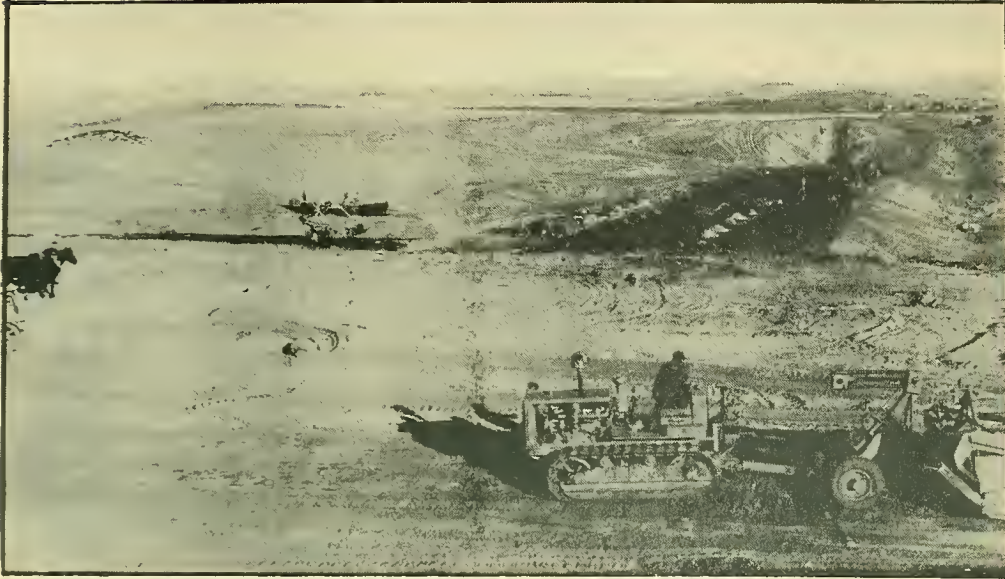
The trail is being made by Indians, for Indians to use. Only the foreman is white. Apaches drive trucks and tractors, operate caterpillars and road graders, compressors and jackhammer drills, handle dynamite and blast.

When the trail is done, these same boys will begin the program of drainage that soon will transform this age-old swamp into fertile acres around Apache homes.

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Cover; The cover photograph, which shows some of the San Carlos cattle herd, San Carlos, Arizona, is by Erik W. Allstrom, Camp Superintendent, CCC-ID.

TWO VIEWS OF WORK AT CCC-ID DAM NO. 179,
STONEMAN, STANDING ROCK AGENCY, NORTH DAKOTA



MARKETING COOPERATIVES FOR INDIANS

By Edward Huberman

Textbook Writer And Curriculum Research Worker, Indian Service



Here's an Indian farmer with a small acreage that he works himself. Each year he buys seed, repairs his equipment, does his plowing, sowing, cultivating, harvesting. He has a few beef cattle and one or two dairy cows. On a small scale he raises chickens and hogs.

Down the road a way lives another Indian farmer with the same kind of situation. Nearby there are a dozen others, perhaps more.

In order to make a living these men have to sell their farm products for enough money to pay the cost of raising those products, plus a little extra. This "little extra" is the money each farmer will have for meeting the food and clothing needs of his family, or for any other expenses that may come up. Of course, every farmer tries to make that "little extra" bigger. The bigger it becomes, the more comfort and security he and his family can enjoy.

Many farmers in many communities have learned about two important ways of increasing their real incomes. When farmers get

together, pool their purchases and buy their supplies cooperatively, they can usually obtain for themselves more goods of higher quality at lower cost. At the other end of the scale, farmers can raise their real incomes by selling their products on a cooperative basis. A "marketing co-op" is the way to do this.

In different parts of the United States groups of neighbors, some of them very much like our dozen Indian farmers, have organized marketing co-ops. There were about 11,000 of these organizations all over the country in 1937. They had more than $3\frac{1}{4}$ million members. And in some communities the farmers were so cooperative-minded that they belonged to three or four co-ops at once!

Marketing co-ops sell cattle, sheep, pigs, chickens, eggs, milk, fruit, vegetables, grain, cotton and other farm products for their members.

"Selling", though a small word, is a big job, and often means much more than taking something off the farm, putting it into the eager hands of a waiting buyer and pocketing the money. A good job of selling farm products means that the farmer will get the best possible price for his goods.

To do this good job of selling, a marketing co-op, made up of a group of farmers who pool their farm products and sell in quantity lots, might have to put a product up in a special package, or grade it, or store it for a while, or ship it in carloads. Any or all of these methods, properly used, help to raise the farmer's income.

It costs money to sell farm products. If farmers can cut down on this cost and still do just as good a selling job, it will mean more money in their pockets. If city customers want their butter packaged a certain way, or eggs graded according to government standards, a marketing co-op is in a much better position to take care of these needs than an individual farmer working by himself.

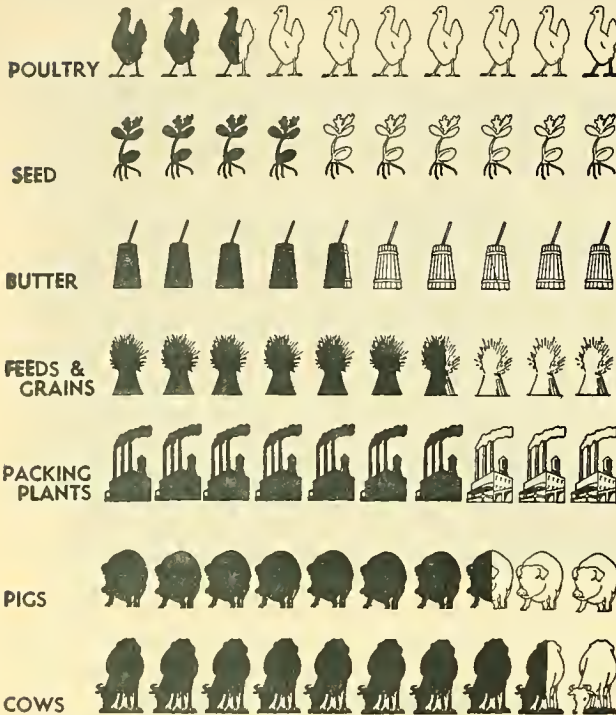
If it seems best to put a certain number of eggs in cold storage until they can be sold at a good price, a marketing co-op can handle this job better than one lone farmer. Besides, the co-op would be likely to know just when to hold any special product, and when to sell, because the co-op manager makes it his business to study the markets carefully and then inform the members about these things.

As soon as co-op members learn how much they can save by shipping their goods in carload lots to big-city markets, they will organize themselves to do business in just this way.



COOPERATIVE SHARE OF DENMARK'S AGRICULTURE

BLACK FIGURES—HANDLED BY CO-OPS
EACH FIGURE 10% OF TOTAL BUSINESS



finds out how consumers want their farm products - what shape, what size, what grade, what season of the year.

The farmer who raises only small quantities can't possibly cater to all the demands of the best-paying city market. It would take more time and trouble than it was worth. But his co-op, by pooling his products with those of all his fellow members can meet the market demands and get a better price for all the co-operators. And savings made by the co-op go right back to the farmer-members.

"Sell the best product in the best way on the best market at the best time, so that the co-op member may get the best price." That, in short, is the purpose of a marketing cooperative.

Many co-ops' have found it possible, after they gained experience in the business, to set up agencies in distant cities where the best markets are, or to make arrangements for some agent already there to handle the co-op shipments.

Farmers who belong to co-ops can see all these advantages and many others. They know that as farmers their main business is farming. They cannot spend all the time it would take, especially in busy seasons, to learn how to become specialists in selling. But their co-op can and does take time, for the benefit of all the members.

The co-op watches the markets and

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THE PAPAGO INDIAN FAIR

Text by Claude C. Cornwall, Camp Supervisor, CCC - ID; Photograph
by Erik W. Allstrom, Camp Supervisor, CCC - ID



The photograph above shows a part of the exhibit which filled four school rooms at the second annual Papago fair recently held at Sells, Arizona. There were squash weighing 68 pounds, kaf-fir corn 14 feet in height and Indian corn with 12-foot stalks bearing multi-colored ears (the Papagos regard with special pride corn with two or more colors to the ear). There was Sudan grass ten feet high, more than a dozen different kinds of legumes, melons, pumpkins, chile, peppers. All of these were grown with flash flood irrigation. From the irrigated areas in San Xavier came tobacco five feet tall, good quality Irish potatoes and practically every variety of garden vegetable grown in the Southwest.

Fine example of Papago baskets were included in the hand-work exhibit at the fair. A smoothly-run rodeo was one feature; also a grand barbecue served on the Agency campus at Sells.

This fair was the second held by the Papago Indians. Spectators commented on the increased attractiveness of the displays, and the improvement in the general management of the event.

CCC - ID TRAINING LEADS TO JOB AS MECHANIC

FOR AIR TRANSPORTATION COMPANY

3259 West 66th Street,
Chicago, Illinois.

Mr. Fred Anderson,
Project Manager, CCC - ID,
Standing Rock, North Dakota.

Dear Mr. Anderson:

I am working for the American Air Lines as a mechanic in the overhaul department. They employ about 900 men the year around and have about 80 twin motor passenger ships-and I don't know how many small ships.

At the present time I am getting \$87.00 per month. If I stay on I get a raise every six months, and after 18 months I will have to take an examination; then I get in to the \$.75 per hour class.

What experience I got working at the garage has sure helped me in getting this job.

Regards to everyone in there, I am,

Thomas Short.

* * * * *

ENROLLEE TRAINING PROGRAM AT RED LAKE

CCC - ID enrollees at Red Lake, Minnesota, learn in their spare time such varied techniques as the basic principles of forestry practice, how to use hand tools, the principles of machine operation, economical and practical cookery, carpentry, map making and drafting, first-aid and safety training, and basket ball.

Attendance is voluntary. Instruction, most of which is informal, is carried on by CCC and Agency personnel.

NOTES FROM WEEKLY PROGRESS REPORTS OF CIVILIAN CONSERVATION CORPS - INDIAN DIVISION

Pine Beetle Control At Warm Springs, Oregon. Our Pine Beetle treating crews have brought the grand total of trees treated to 2,562, over an acreage of 16,580 acres. We have been working the area near camp and the weather has not been so bad as to hinder the work.

Fire hazard work was done this month in the cutting and disposing of snags. Three miles of this work was done along the side of the trail.

We had two heavy rain storms during the month and this kept a small crew with a dump truck busy hauling gravel for the deepest ruts and mud holes. They also drained water holes in the road and kept the drain ditches open. Terrance Courtney, Leader.

Truck Trail Construction At Seminole, Florida. The crew worked two days building a trail 12 feet in width from the inner reservation gate towards the main gate going east. In two days the crew of 8 men worked hard and put up approximately 320 feet of trail with ditches on the side that will connect with an old ditch that drains the headquarters to a natural swamp drain leading to the south.

The stretch of trail mentioned above makes it possible to travel one of the worst pieces of slick marl flat, the entire trip from Im-mokalee to the reservation. W. Stanley Hanson, Mechanic.

Truck Trail Maintenance At Hoopa Valley, California. The crew working on the truck trail maintenance project has completed work on the Dowd and Tulley Creek Trails. The Mail Truck Trail was put in shape at the Pine Creek Bridge and made passable. It was decided to let the large slide at the Bridge settle before removing any more dirt. The crew and bulldozer have moved to the Weitchpec Bridge project and are building the approach on the west side of the Foot Bridge which will be reinforced and made into a vehicle bridge. Patrick I. Rogers.

Fencing Erosion Projects At Pima, Arizona. All work projects are progressing nicely. The weather has remained fine, although we could use some rain.

A fencing crew was started on the work of fencing the Blackwater Erosion Control areas No. 25 and 26. Altogether, this now makes a total of 25 men working in the Blackwater District.

Telephone line construction is now moving rapidly with about 20 men at work setting poles and stringing wire. Clyde H. Packer, Project Manager.

Trail Work At Choctaw-Chickasaw Sanatorium, Oklahoma. Work on truck trail maintenance, reservation trails, has continued with very good progress during the week. These trails are now in very good condition, however, it will be necessary that additional maintenance work and grading



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be done from time to time. It is planned to grade these trails in the near future. These trails are very important from a fire fighting point of view and it is desirable that they be kept in good condition. Dr. W. E. Van Cleave, Superintendent.

First-Aid Class At Paiute, Utah. Last week a representative of the American Red Cross, conducted a first-aid school at the Shivwits Community Center. The leaders, assistant leaders, truck drivers and all enrollees who had finished fifth grade in school, took the course.

This was the first Indian class for the instructor. The entire group was commended on the way in which they adapted themselves to the work and on the interest which was manifest. Os B. Fry.

Sawing Wood For Spike Camp At Fort Belknap, Montana. This week there was an average of five enrollees sawing wood for the Spike Camp for next spring. It was intended to work these enrollees in Browns Canyon but due to trail conditions and the truck being busy hauling lumber for the garage it was deemed necessary to use them close by. After the First we plan on drilling and blasting rock in Browns Canyon to repair the trail that was washed out last summer by the flood. William Cross.

Fence Construction At Mission, California. Work started on fence construction along the east boundary. A fire break is being cut along the line in preparation to

long the line in preparation to building the fence and the work of construction of the fence will continue until it is completed. This will now keep the cattle on the reservation and is needed improvement which was asked for by the committee.

Dance At Pipestone, Minnesota. Last fall a community hall was erected on the reservation under a WPA project and on Thursday evening a community dance took place. A group of 75 people attended the dance and all participated in the old time square dances and the latest fox trots. Later in the evening a number of Sioux Indian dances were enjoyed. The older people took part in the Omaha, the Rabbit Dance, the Harvest Dance and the Stomp Dance. George R. Brown, Sub-Foreman.

Soil Conservation At Winnebago, Nebraska. The channel cleaning and straightening project has progressed very well. Besides protecting the community building grounds, this project will greatly benefit the appearance of the grounds. Approximately 1500 cubic yards of earth have been moved on this project to date.

Two small log check dams were completed this week and a fence was built to protect a small springy area. Clinton E. Stahly, Foreman.

Fencing At Mescalero, New Mexico. We have resumed the pasture fence work with a crew of 10 men for a start. Despite the threatening weather the crew went about the work as usual and are doing well with it. "Truckers" are busy hauling and stringing posts along the line of work. J. A. Montoya.